

DOCUMENTED PLANT CHROMOSOME NUMBERS.—Following are the first in a continuing series of reports of chromosome counts accompanied by illustrations and backed by voucher herbarium specimens. The initiator of the series and advisor for it is Dr. C. R. Bell, Department of Botany, University of North Carolina, Chapel Hill, North Carolina 27515. Further contributions are invited. They may be sent either to Dr. Bell or to the editor of SIDA at the Herbarium, Southern Methodist University, Dallas, Texas 75222.

DOCUMENTED PLANT CHROMOSOME NUMBERS 65: 1

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The work here reported was done under the direction of Dr. C. Ritchie Bell at the University of North Carolina during the summer of 1961, under the National Science Foundation Undergraduate Research Participation Program.

APIACEAE (UMBELLIFERAE)

PASTINACA SATIVA L.^a (Fig. 1.) $n=11$. N.C., Watauga Co.: C. R. Bell 17126 (NCU).

ASTERACEAE (COMPOSITAE)

LIATRIS ASPERA (Michx.) Greene.^a (Fig. 2.) $n=10$. N.C., Ashe Co.: Bell 17186 (NCU).

SOLIDAGO PATULA Muhl.^a (Fig. 3.) $n=9$. N.C., Alleghany Co.: Bell 17212 (NCU).

SOLIDAGO PATULA Muhl.^b (Fig. 4.) $n=18$. N.C., Ashe Co.: Bell 17187 (NCU). This is the first tetraploid plant reported for this species.

CAMPANULACEAE

CAMPANULA AMERICANA L.^b (Fig. 5.) $n=17$. N.C., Alleghany Co.: Bell 17158 (NCU).

DROSERACEAE

DROSERIA INTERMEDIA Hayne.^b (Fig. 6.) $n=20$. N.C., Craven Co.: Bell 17158 (NCU). This is the first report of a tetraploid plant for this species.

HYPERICACEAE (GUTTIFERAE)

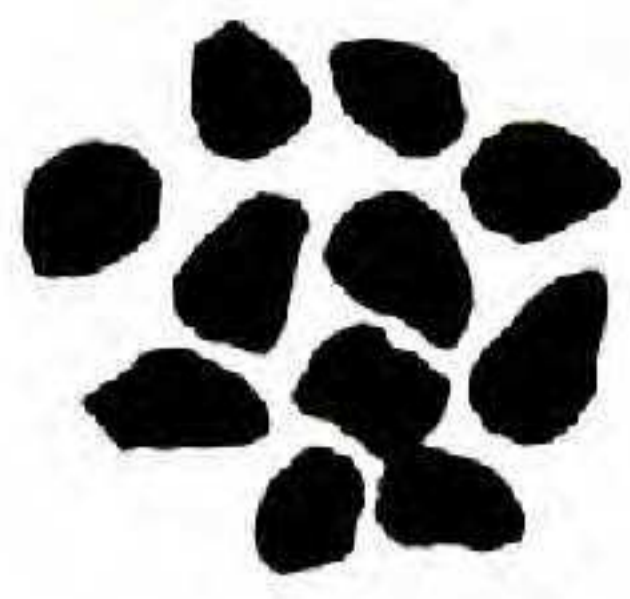
HYPERICUM DENTICULATUM Walt. (Fig. 7.) $n=24$. N.C., Carteret Co.: Bell 17167 (NCU). This is the first reported tetraploid plant in the $n=12$ series of the genus.

HYDROPHYLLACEAE

PHACELIA MACULATA Wood.^a (Fig. 8.) $n=5$. S.C., Lancaster Co.: Bell 17031 (NCU).

^a Species for which a similar chromosome count has been published previously.

^b Species for which a chromosome count differing from this one has been published previously.



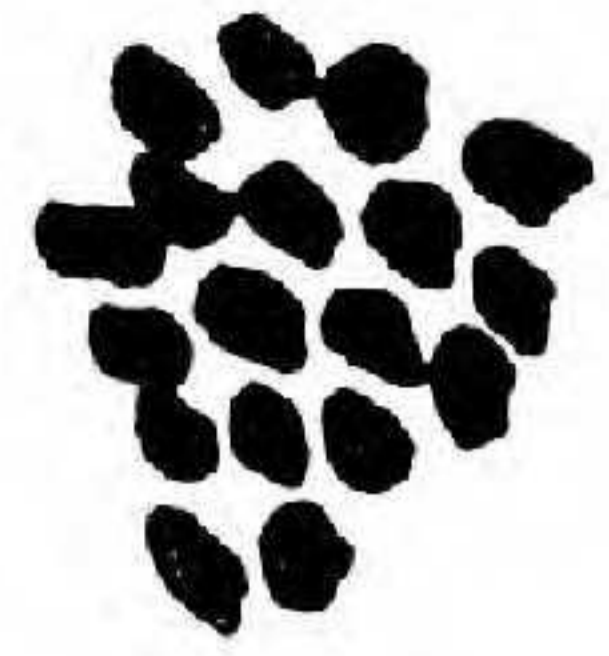
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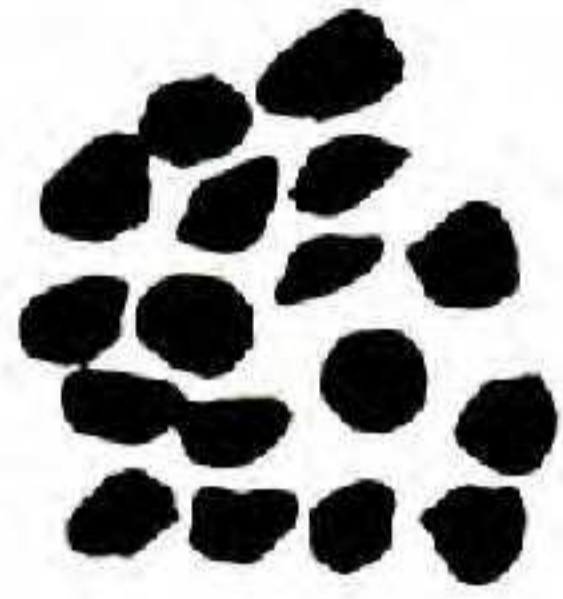
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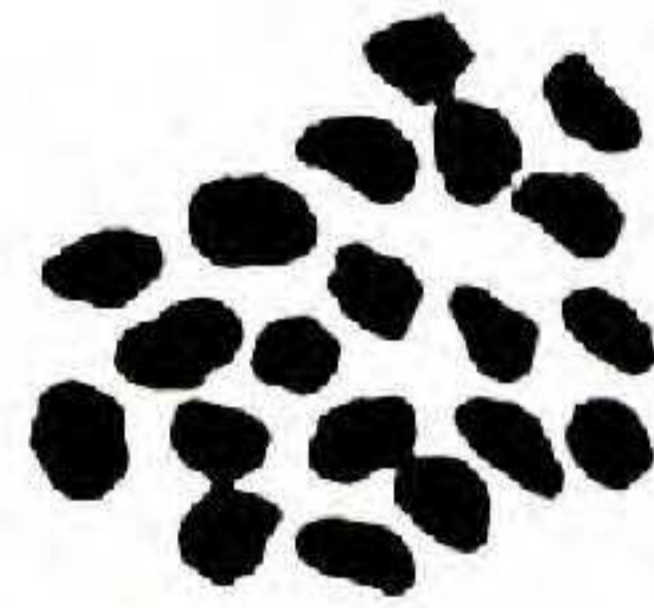
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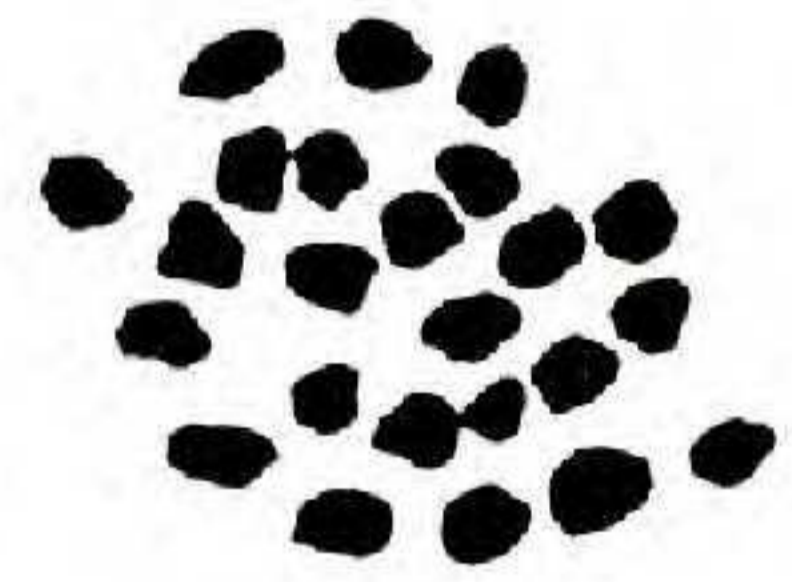
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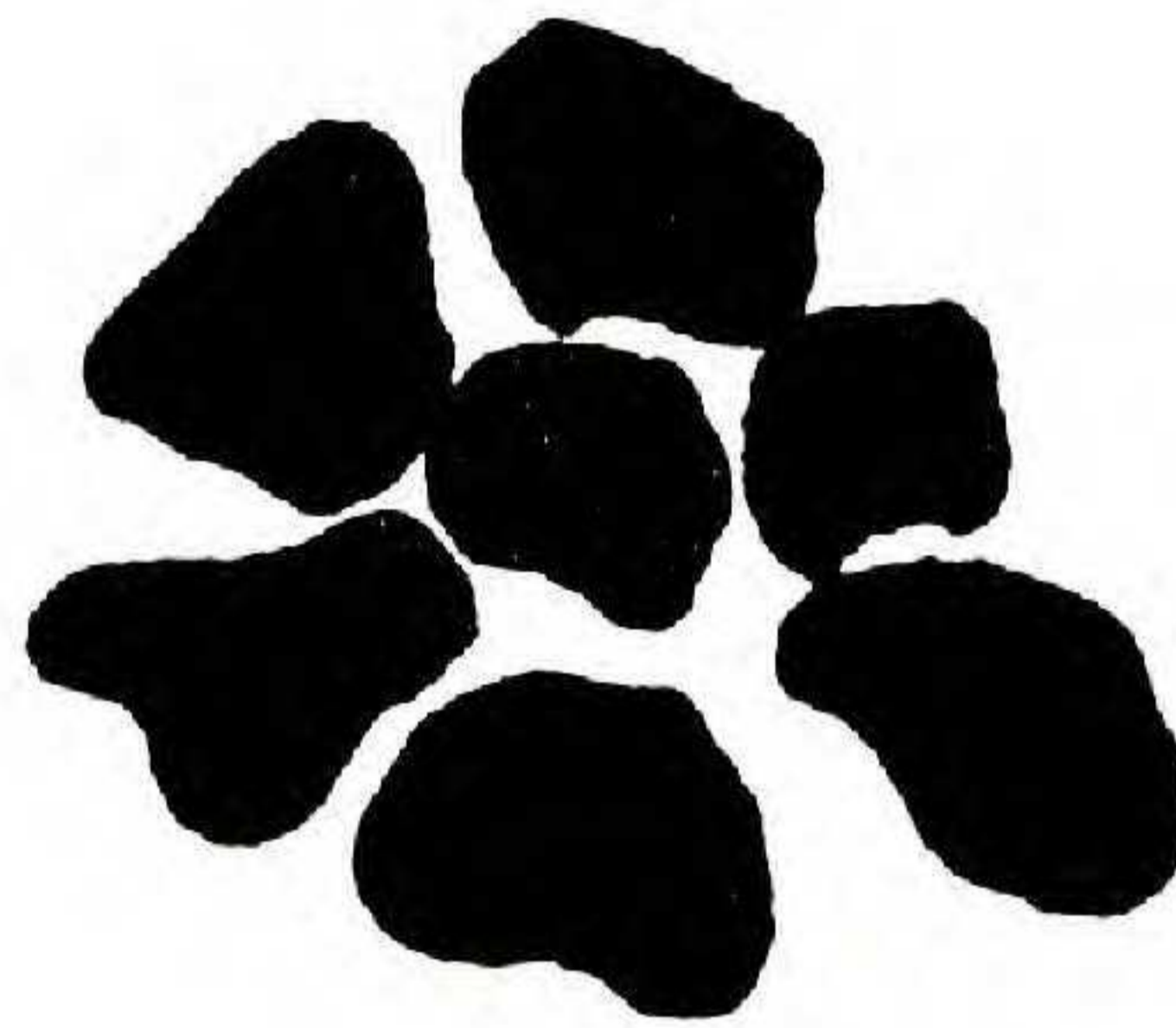
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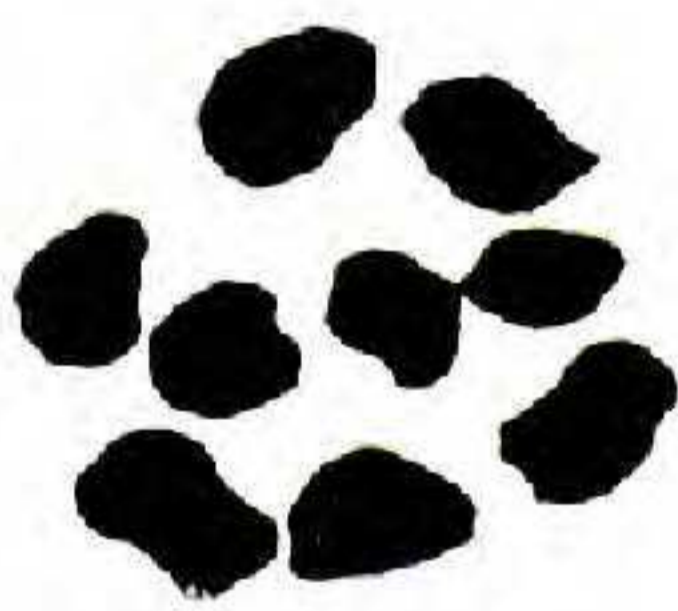
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9



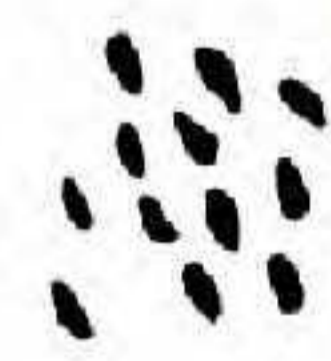
10



11



12



13

all approx. x1450

LILIACEAE

ALLIUM ALLEGHANIENSE Small.^a (Fig. 9.) $n=7$. N.C., Ashe Co.: Bell 17190 (NCU).

POLEMONIACEAE

PHLOX MACULATA L.^a (Fig. 10.) $n=7$. N.C., Alleghany Co.: Bell 17190 (NCU).

RUBIACEAE

HOUSTONIA PURPUREA L.^a (Fig. 11.) $n=9$. N.C., Ashe Co.: Bell 17140 (NCU). Meiosis is highly irregular. Plants of 8—11 chromosomes were observed.

SCROPHULARIACEAE

PENSTEMON SMALLII Heller. (Fig. 12.) $n=8$. N.C., Watauga Co.: Bell 17121 (NCU).

SOLANACEAE

SOLANUM CAROLINENSE L.^a (Fig. 13.) $n=12$. N.C., Chatham Co.: Bell 17147 (NCU).

DOCUMENTED PLANT CHROMOSOME NUMBERS 65: 2
P. E. BOSTICK

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The work here reported was done under the direction of Dr. C. Ritchie Bell at the University of North Carolina during the summer of 1960, under the National Science Foundation Undergraduate Research Participation Program.

APIACEAE (UMBELLIFERAE)

DAUCUS CAROTA L.^a (Fig. 1.) $n=9$. N.C., Chatham Co.: P. E. Bostick 1 (NCU).

ASTERACEAE (COMPOSITAE)

ASTER PILOSUS Willd.^b (Fig. 2.) $n=12$. N.C., Orange Co.: Bostick IV (NCU).

CHRYSANTHEMUM LEUCANTHEMUM L.^a (Fig. 3.) $n=9$. N.C., Orange Co.: Bostick 72—7 (NCU).

ERIGERON PHILADELPHICUS L.^a (Fig. 4.) $n=9$. N.C., Orange Co.: Bostick 61—1 (NCU).

GAILLARDIA AESTIVALIS (Walt.) H. Rock var. LANCEOLATA (Michx.) Ahles. (Fig. 5.) $n=17$. N.C., Richmond Co.: C. R. Bell 17048 (NCU).

HIERACIUM VENOSUM L.^a (Fig. 6.) $n=9$. N.C., Orange Co.: Bostick 47—3 (NCU).

POLYMNIA UVEDALIA L. (Fig. 7.) $n=14$. N.C., Orange Co.: Bostick 7 (NCU).

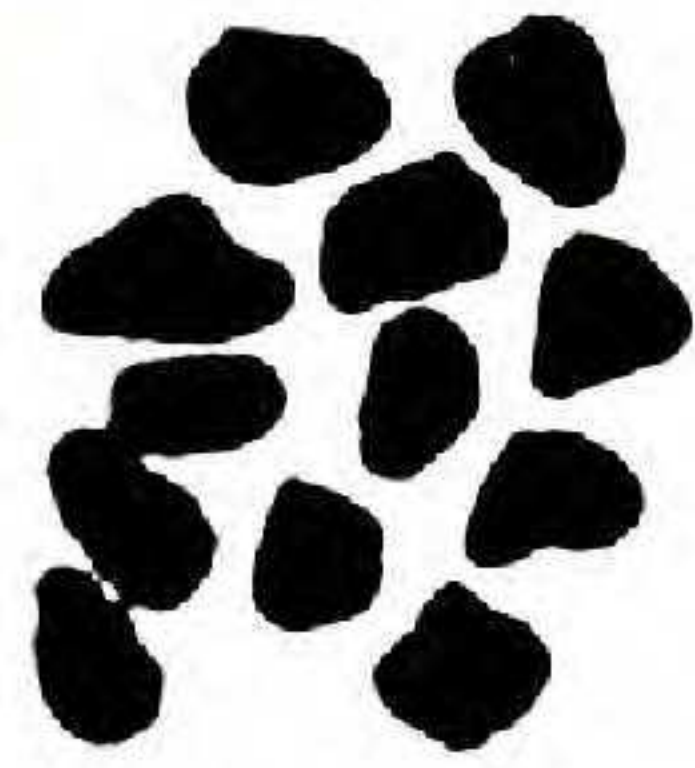
^a Species for which a similar chromosome count has been published previously.

^b Species for which a chromosome count differing from this one has been published previously.

^c No chromosome numbers reported previously for any member of this genus.



1



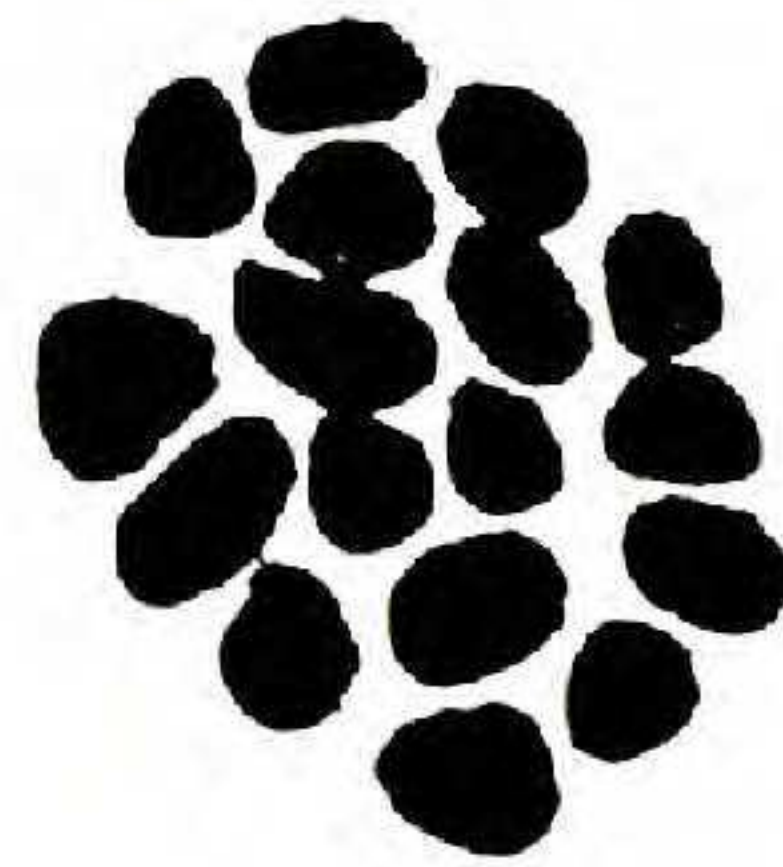
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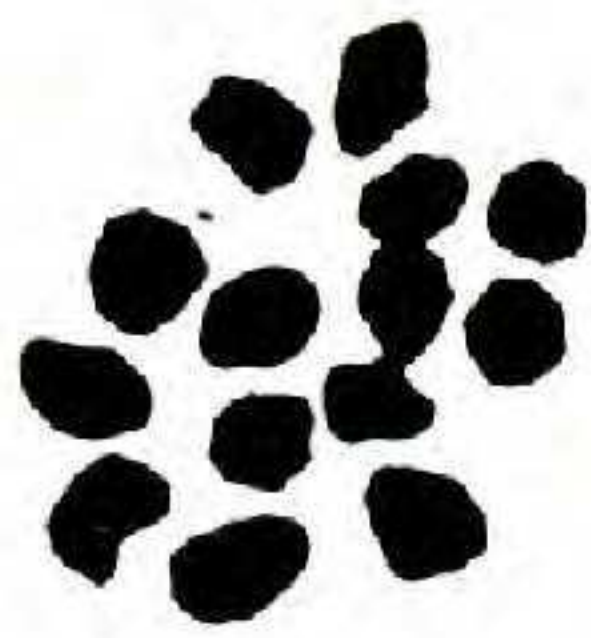
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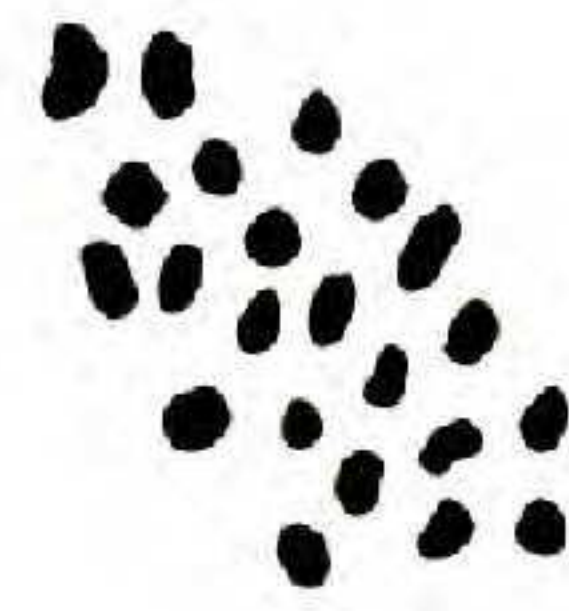
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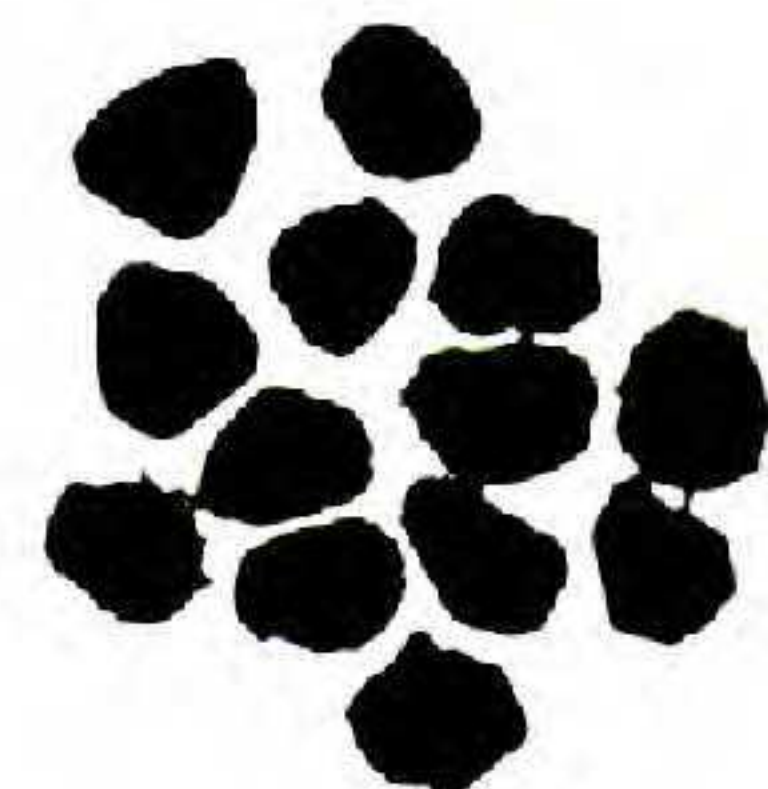
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15



16



17



18

SOLIDAGO PINETORUM Small. (Fig. 8.) n=9. N.C., Orange Co.: *Bostick 17* (NCU).

BALSAMINACEAE

IMPATIENS CAPENSIS Meerb. (Fig. 9.) n=10. N.C., Orange Co.: *Bostick 4* (NCU).

CAMPANULACEAE

LOBELIA PUBERULA Michx.^b (Fig. 10.) n=14. N.C., Jackson Co.: *Bostick 23* (NCU).

GENTIANACEAE

SABATIA BRACHIATA Ell. (Fig. 11.) n=14. N.C., Pender Co.: *Bell 17081* (NCU).

HYPERICAEAE (GUTTIFERAE)

HYPERICUM ADPRESSUM Barton. (Fig. 12.) n=9. N.C., Richmond Co.: *Bell 17055* (NCU).

MELASTOMATACEAE

RHEXIA ALIFANUS Walt.^c (Fig. 13.) n=11. N.C., Pender Co.: *Bell 17078* (NCU).

RHEXIA MARIANA L. (Fig. 14.) n=22. N.C., Orange Co.: *Bostick 13* (NCU).

ORCHIDACEAE

GOODYERA PUBESCENS (Willd.) R. Br. (Fig. 15.) n=13. N.C., Richmond Co.: *Bell 17057* (NCU).

PHYTOLACCACEAE

PHYTOLACCA AMERICANA L. (Fig. 16.) n=18. N.C., Orange Co.: *Bostick 3* (NCU).

RANUNCULACEAE

CLEMATIS VIRGINIANA L.^a (Fig. 17.) n=8. N.C., Macon Co.: *Bostick 18* (NCU).

SCHIZANDRACEAE

SCHIZANDRA COCCINEA Michx.^c (Fig. 18.) n=13. N.C., Richmond Co.: *Bell 17050* (NCU).

SCROPHULARIACEAE

AUREOLARIA VIRGINICA (L.) Pennell.^c (Fig. 19.) n=13. N.C., Orange Co.: *Bell 17060* (NCU).

MIMULUS RINGENS L.^b (Fig. 20.) n=8. N.C., McDowell Co.: *Bell 17079* (NCU).

SOLANACEAE

PHYSALIS HETEROPHYLLA Nees. (Fig. 21.) n= 12. N.C., Orange Co.: *Bell 17059* (NCU).

THEACEAE

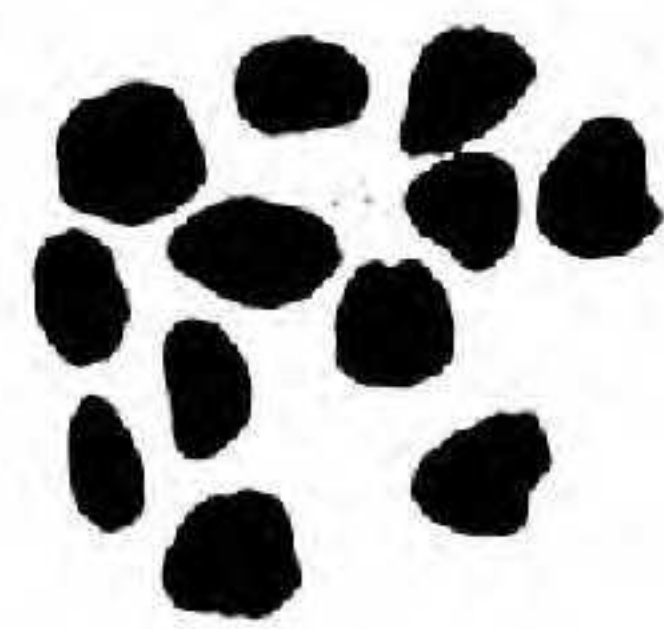
GORDONIA LASIANTHUS (L.) Ell. (Fig. 22.) n=18. N.C., Pender Co.: *Bell 17070* (NCU).



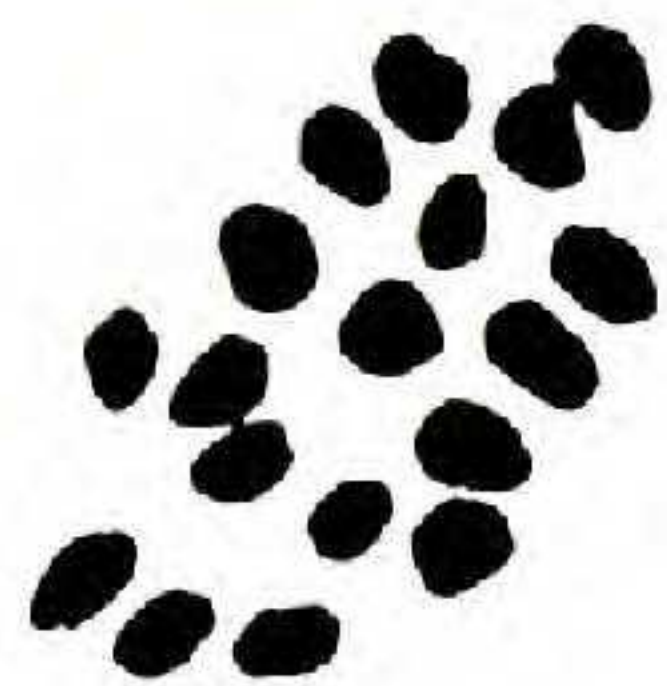
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20



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22

DOCUMENTED PLANT CHROMOSOME NUMBERS 65: 3
C. RITCHIE BELL

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Figures 1—26 are camera lucida drawings, all approximately 725 \times .

ASTERACEAE (COMPOSITAE)

BLENNOSPERMA NANUM var. ROBUSTUM J. T. Howell.^a (Fig. 1.)
n=7. Calif., Marin Co.: *Bell 17485* (NCU).

CHAENACTIS STEVIOIDES H. & A. (*C. latifolia* Stockw.) (Fig. 2.)
n=5. Ariz., Maricopa Co.: *Bell 17557* (NCU).

PALAFXIA LINEARIS (Cav.) Lag.^c (Fig. 3.) n=10. Mexico, Sonora,
Puerto Penasco: *Bell 17545* (NCU).

BORAGINACEAE

AMSINCKIA TESSELLATA Gray.^a (Fig. 4.) n=12. Ariz., Maricopa Co.:
Bell 17555 (NCU).

HELIOTROPIUM CURASSAVICUM L.^b (Fig. 5.) n=26. Mexico, Sonora,
Puerto Penasco: *Bell 17537* (NCU).

BRASSICACEAE (CRUCIFERAE)

CAKILE MARITIMA Scop.^a (Fig. 6.) n=9. Calif., San Luis Obispo Co.:
Bell 17619 (NCU).

CARDAMINE PARVIFLORA var. ARENICOLA (Britton) O. E. Schulz.
(Fig. 7.) n=8. Ill., Vermilion Co.: *H. E. Ahles s.n.* (NCU).

CARDAMINE CORDIFOLIA Gray. (Fig. 8.) n=12. Utah, Cache Co.: *Bell*
s.n. (NCU.)

CARDAMINE HIRSUTA L. (Fig. 9.) n=8. N.C., Orange Co.: *Ahles 9957*
(NCU).

^a Species for which a similar chromosome count has been published previously.

^b Species for which a chromosome count differing from this one has been published previously.

^c No chromosome numbers reported previously for any member of this genus.

CAPPARACEAE

WISLIZENIA REFRACTA Engelm.^c (Fig. 10.) n=20. Mexico, Sonora, Sonoita: *Bell 17520* (NCU).

CUCURBITACEAE

MARAH FABACEUS (Naud.) Greene.^a *Echinocystis fabacea* Naud.) (Fig. 11.) n=16. Calif., San Mateo Co.: *Bell 17411* (NCU).

EUPHORBIACEAE

CROTON PUNCTATUS Jacq. (Fig. 12.) n=14. N.C., Onslow Co.: *Bell 17063* (NCU).

SAPIUM BILOCULARE (Wats.) Pax.^c (Fig. 13.) n=11. Ariz., Pima Co.: *Bell 17519* (NCU).

FABACEAE (LEGUMINOSAE)

HOFFMANNSEGGIA MICROPHYLLA Torr. (Fig. 14.) n=12. Calif., Riverside Co.: *Bell 17595* (NCU).

HYDROPHYLLACEAE

PHACELIA CRENULATA Torr.^a (Fig. 15.) n=11. Ariz., Pima Co.: *Bell 17509* (NCU).

PHACELIA CRENULATA Torr.^a (Fig. 16.) n=11. Ariz., Maricopa Co.: *Bell 17560* (NCU).

PHACELIA MACULATA Wood.^a (Fig. 17.) n=5. S.C., Lancaster Co.: *Bell 17032* (NCU).

HYPERICACEAE (GUTTIFERAE)

HYPERICUM MUTILUM L. (Fig. 18.) n=8. N.C., Pender Co.: *Bell 17075* (NCU).

HYPERICUM PUNCTATUM Lam. (Fig. 19.) n=7. N.C., Pender Co.: *Bell 17073* (NCU)

LENNOACEAE

PHOLISMA PANICULATUM Templt. (Fig. 20.) n=18. Calif., San Luis Obispo Co.: *Bell 17618* (NCU).

ONAGRACEAE

OENOTHERA CLAVAEFORMIS var. AURANTIACA (Wats.) Munz.^b (Fig. 21.) n=6. Ariz., Maricopa Co.: *Bell 17558* (NCU).

PORTULACACEAE

CLAYTONIA VIRGINICA L.^a (Fig. 22.) n=8. (Counts of n=14, 15, 16, and 17 were also obtained.) Ill., Vermilion Co.: *Bell 1441* (NCU).

PRIMULACEAE

HOTTONIA INFLATA Ell. (Fig. 23.) n=10. N.C., Northampton Co.: *Ahles 38439* (NCU).

SCROPHULARIACEAE

BELLARDIA TRIXAGO (L.) All.^c (Fig. 24.) n=12. Calif., Contra Costa Co.: *Bell 17679* (NCU).

VERONICA CAMPYLOPODA Boiss. (Fig. 25.) n=ca. 18. Utah, Cache Co.: *Bell 17628* (NCU).

SOLANACEAE

SOLANUM MAMMOSUM L. (Fig. 26.) n=12. Grown in greenhouse from seed from Hawaii, *Bell s.n.* (NCU).

